

What is claimed is:

1. A method for controlling the drive unit of a vehicle, the method comprising the steps of:

presetting a desired value for an output quantity of said drive unit;

5 causing an actual value of said output quantity to track said desired value in dependence upon the operating state of said drive unit via a slow actuating path or a rapid actuating path;

when there is a transition from said slow actuating path to said rapid actuating path, setting said desired value first equal  
10 to said actual value starting from a wanted value; and,

thereafter, again returning said desired value to said wanted value with its change limited.

2. The method claim 1, comprising the further step of limiting the change of said desired value with a filter.

3. The method claim 1, wherein said filter is a lowpass filter.

4. The method claim 2, comprising the further step of selecting a time constant of said filter in dependence upon an operating point of said drive unit.

5. The method claim 1, comprising the further step of limiting the change of said desired value via a ramp function.

6. The method claim 1, comprising the further step of detecting a transition from said slow actuating path to said rapid actuating path when one of the following conditions is satisfied:

a switchover from a homogeneous operation into a stratified  
5 operation; a clutch is actuated; an idle state is set; or, a  
minimal permissible charge is reached.

7. The method claim 1, comprising the further step of selecting  
a torque as said output quantity.

8. The method claim 1, comprising the further step of selecting  
a charging path as said slower actuating path.

9. The method claim 1, comprising the further step of selecting  
a crankshaft angle synchronous path or a fuel path as said rapid  
actuating path.

10. The method claim 9, wherein said crankshaft angle  
synchronous path is an ignition angle path.

11. An arrangement for controlling the drive unit of a vehicle,  
the arrangement comprising:

means for presetting a desired value for an output quantity  
of said drive unit;

5 means for causing an actual value of said output quantity to  
track said desired value in dependence upon the operating state  
of said drive unit via a slow actuating path or a rapid actuating  
path;

10 means for setting said desired value first equal to said  
actual value starting from a wanted value when there is a  
transition from said slow actuating path to said rapid actuating  
path; and,

means for thereafter again returning said desired value to

said wanted value with its change limited.